



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

TM

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/142,392 06/08/98 GUST

J

PM92/0708

JAMES W MILLER
821 MARQUETTE AVENUE
SUITE 1005 FOSHAY TOWER
MINNEAPOLIS MN 55402

EXAMINER

BRITTON, M

ART UNIT

PAPER NUMBER

3611

6

DATE MAILED:

07/08/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/142,392

Applicant
Jackie R. Gust et al.

Examiner
Britton Michael

Group Art Unit
3611



☒ Responsive to communication(s) filed on May 25, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-24 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-13, 23, and 24 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☒ Claims 14-22 are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☒ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 3611

DETAILED ACTION

Election/Restriction

1. This application contains claims directed to the following patentably distinct species of the claimed invention: Species 1 is depicted in drawings 1-6. Species 2 is depicted in drawings 7. Species 3 is depicted in drawings 8 and 9.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the

Art Unit: 3611

examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

2 During a telephone conversation with James W. Miller Esq. on May 21, 1999 a provisional election was made without traverse to prosecute the invention of species 1, claims 1-13, 23, 24 and 25. Affirmation of this election must be made by applicant in replying to this Office action. Claims 14-22 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

3 Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

Specification

4. The disclosure is objected to because of the following informalities: On page 11, lines 34 and 35, reference numbers 111 and 115 are not indicated in the drawings. On page 12, line 19, reference number 78 is referred to as representing a battery when 76 is intended.

Appropriate correction is required.

Art Unit: 3611

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

6. Claims 1, 7,8-10,12,13, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Reimers et al..

Reimers et al. discloses an electric drive mower with motor generator set comprising a frame (12), ground engaging wheels (14,16), at least one electric motor connected to at least one of the wheels (Column 7, line 51), at least one turf maintenance operating unit (Column 5, line 33), at least one electric motor connected to the operating unit (22), an electric drive system comprising, an internal combustion engine (92), an electric power generating device driven by engine (31), a battery power source (84), an electric power supply circuit for connecting the electric motor to the power generating device and to the battery power source to allow electric power to be supplied from either/or, the electric power generating device is connected to the battery for recharging during operation of the internal combustion engine (Column 7, line 53), the electric power generating comprising an alternator (114), a controller for controlling application of the electric power to the motors (130), where two of the wheels are individually driven by separate electric motors (148,150), where the machine comprises a grass mowing machine and

Art Unit: 3611

where the operating unit comprises a grass cutting unit (Column 1, line 5), where the grass mowing machine comprises a riding lawn mower (Column 1, line 5).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2 -6, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reimers et al. in view of Arendt.

Reimers et al. discloses the claimed invention including means for sensing a state of charge of the battery power source and means for reporting same to a user of the machine (Column 22, line 23), and indicating when the state of the charge is below a predetermined level (Column 22, line 32). Reimers et al. does not disclose a switch for shutting off the internal combustion engine to make the battery source the sole source of electric power for the motors, a switch operable by the user to select when the battery power source shall serve as the sole source of electric power and means for preventing operation from only the battery source when the state of charge of the battery is below a minimum level.

Arendt discloses a self charging electric vehicle with a switch for shutting off the internal combustion engine to make the battery source the sole source of electric power for the motors

Art Unit: 3611

(Column 1, line 65), a switch operable by the user to select when the battery power source shall serve as the sole source of electric power (Column 1, line 65) and means for preventing operation from only the battery source when the state of charge of the battery is below a minimum level (Column 2, line 90) to vary the operation of the vehicle depending upon the driving conditions.

It would have been obvious to one having ordinary skill in the art to modify Reimers et al.'s electric drive mower with motor generator set to include Arendt's self charging electric vehicle with a switch for shutting off the internal combustion engine to make the battery source the sole source of electric power for the motors), a switch operable by the user to select when the battery power source shall serve as the sole source of electric power and means for preventing operation from only the battery source when the state of charge of the battery is below a minimum level to vary the operation of the vehicle depending upon the driving conditions.

9. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reimers et al. in view of Downing Jr..

Reimers et al. discloses the claimed invention except for a steering wheel and a controller controlling the supply of electric power from the electric drive system to the electric motors with means to responsive to the steering wheel to vary the power supplied to each motor to effect a differential action during a turn.

Downing Jr. discloses an electric tractor with a steering wheel and a controller controlling the supply of electric power from the electric drive system to the electric motors with means to

Art Unit: 3611

responsive to the steering wheel to vary the power supplied to each motor to effect a differential action during a turn (Column 4, line 6) to allow short or sharp turns.

It would have been obvious to one having ordinary skill in the art to modify Reimers et al.'s electric drive mower with motor generator set to include Downing Jr.'s electric tractor with a steering wheel and a controller controlling the supply of electric power from the electric drive system to the electric motors with means to responsive to the steering wheel to vary the power supplied to each motor to effect a differential action during a turn to allow short or sharp turns.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shibata et al. discloses a device for charging a storage battery.

Namdari discloses an apparatus for collecting and compacting leaves and grass clippings.

Kitada discloses an electric hybrid vehicle.

Urban et al. discloses a drive system for an electric hybrid vehicle.

11 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Britton whose telephone number is (703) 603-1206.

MB

MB

July 1, 1999

Kevin Hurley 7/3/99
KEVIN HURLEY
PRIMARY EXAMINER